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in paragraph (c) of this section by a person designated under §213.7.

(b) Each inspection shall be made on foot or by riding over the track in a vehicle at a speed that allows the person making the inspection to visually inspect the track structure for compliance with this part. However, mechanical, electrical, and other track inspection devices may be used to supplement visual inspection. If a vehicle is used for visual inspection, the speed of the vehicle may not be more than 5 miles per hour when passing over track crossings and turnouts, otherwise, the inspection vehicle speed shall be at the sole discretion of the inspector, based on track conditions and inspection requirements. When riding over the track in a vehicle, the inspection will be subject to the following conditions-

(1) One inspector in a vehicle may inspect up to two tracks at one time provided that the inspector's visibility remains unobstructed by any cause and that the second track is not centered more than 30 feet from the track upon which the inspector is riding;

- (2) Two inspectors in one vehicle may inspect up to four tracks at a time provided that the inspectors' visibility remains unobstructed by any cause and that each track being inspected is centered within 39 feet from the track upon which the inspectors are riding;
- (3) Each main track is actually traversed by the vehicle or inspected on foot at least once every two weeks, and each siding is actually traversed by the vehicle or inspected on foot at least once every month. On high density commuter railroad lines where track time does not permit an on track vehicle inspection, and where track centers are 15 foot or less, the requirements of this paragraph (b)(3) will not apply;
- (4) Track inspection records shall indicate which track(s) are traversed by the vehicle or inspected on foot as outlined in paragraph (b)(3) of this section.
- (c) Each track inspection shall be made in accordance with the following schedule—

Class of track	Type of track	Required frequency
Excepted track and Class 1, 2, and 3 track.	Main track and sidings	Weekly with at least 3 calendar days interval between inspections, or before use, if the track is used less than once a week, or twice weekly with at least 1 calendar day interval between inspections, if the track carries passenger trains or more than 10 million gross tons of traffic during the preceding calendar year.
Excepted track and Class 1, 2, and 3 track. Class 4 and 5 track	Other than main track and sidings	Monthly with at least 20 calendar days interval between inspections. Twice weekly with at least 1 calendar day interval between inspections.

(d) If the person making the inspection finds a deviation from the requirements of this part, the inspector shall immediately initiate remedial action.

NOTE TO §213.233: Except as provided in paragraph (b) of this section, no part of this section will in any way be construed to limit the inspector's discretion as it involves inspection speed and sight distance.

§ 213.234 Automated inspection of track constructed with concrete crossties.

(a) General. Except for track described in paragraph (c) of this section, the provisions in this section are appli-

cable on and after July 1, 2012. In addition to the track inspection required under §213.233, for Class 3 main track constructed with concrete crossties over which regularly scheduled passenger service trains operate, and for Class 4 and 5 main track constructed with concrete crossties, automated inspection technology shall be used as indicated in paragraph (b) of this section. as a supplement to visual inspection, by Class I railroads (including Amtrak), Class II railroads, other intercity passenger railroads, and commuter railroads or small governmental jurisdictions that serve populations greater

than 50,000. Automated inspection shall identify and report exceptions to conditions described in §213.109(d)(4).

- (b) Frequency of automated inspections. Automated inspections shall be conducted at the following frequencies:
- (1) If annual tonnage on Class 4 and 5 main track and Class 3 main track with regularly scheduled passenger service, exceeds 40 million gross tons (mgt) annually, at least twice each calendar year, with no less than 160 days between inspections.
- (2) If annual tonnage on Class 4 and 5 main track and Class 3 main track with regularly scheduled passenger service is equal to or less than 40 mgt annually, at least once each calendar year.
- (3) On Class 3, 4, and 5 main track with exclusively passenger service, either an automated inspection or walking inspection must be conducted once per calendar year.
- (4) Track not inspected in accordance with paragraph (b)(1) or (b)(2) of this section because of train operation interruption shall be reinspected within 45 days of the resumption of train operations by a walking or automated inspection. If this inspection is conducted as a walking inspection, the next inspection shall be an automated inspection as prescribed in this paragraph.
- (c) Nonapplication. Sections of tangent track 600 feet or less constructed of concrete crossties, including, but not limited to, isolated track segments, experimental or test track segments, highway-rail crossings, and wayside detectors, are excluded from the requirements of this section.
- (d) Performance standard for automated inspection measurement system. The automated inspection measurement system must be capable of indicating and processing rail seat deterioration requirements that specify the following:
- (1) An accuracy, to within 1/8 of an inch;
- (2) A distance-based sampling interval, which shall not exceed five feet; and
- (3) Calibration procedures and parameters assigned to the system, which assure that indicated and recorded values

accurately represent rail seat deterioration.

- (e) Exception reports to be produced by system; duty to field-verify exceptions. The automated inspection measurement system shall produce an exception report containing a systematic listing of all exceptions to \$213.109(d)(4), identified so that an appropriate person(s) designated as fully qualified under \$213.7 can field-verify each exception.
- (1) Exception reports must be provided to or be made available to all persons designated as fully qualified under §213.7 and whose territories are subject to the requirements of §213.234.
- (2) Each exception must be located and field-verified no later than 48 hours after the automated inspection.
- (3) All field-verified exceptions are subject to all the requirements of this part.
- (4) Exception reports must note areas identified between % of an inch and ½ of an inch as an "alert."
- (f) Recordkeeping requirements. The track owner shall maintain and make available to FRA a record of the inspection data and the exception record for the track inspected in accordance with this paragraph for a minimum of two years. The exception reports must include the following:
- (1) Date and location of limits of the inspection;
- (2) Type and location of each excep-
- (3) Results of field verification; and
- (4) Remedial action if required.
- (g) Procedures for integrity of data. The track owner shall institute the necessary procedures for maintaining the integrity of the data collected by the measurement system. At a minimum, the track owner shall do the following:
- (1) Maintain and make available to FRA documented calibration procedures of the measurement system that, at a minimum, specify an instrument verification procedure that ensures correlation between measurements made on the ground and those recorded by the instrumentation; and
- (2) Maintain each instrument used for determining compliance with this section such that it accurately provides an indication of the depth of rail

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seat deterioration in accordance with paragraph (d)(1) of this section.

- (h) Training. The track owner shall provide annual training in handling rail seat deterioration exceptions to all persons designated as fully qualified under §213.7 and whose territories are subject to the requirements of §213.234. At a minimum, the training shall address the following:
- (1) Interpretation and handling of the exception reports generated by the automated inspection measurement system;
- (2) Locating and verifying exceptions in the field and required remedial action; and
 - (3) Recordkeeping requirements.

[76 FR 18086, Apr. 1, 2011, as amended at 76 FR 55825, Sept. 9, 2011]

§ 213.235 Inspection of switches, track crossings, and lift rail assemblies or other transition devices on moveable bridges.

- (a) Except as provided in paragraph (c) of this section, each switch, turnout, track crossing, and moveable bridge lift rail assembly or other transition device shall be inspected on foot at least monthly.
- (b) Each switch in Classes 3 through 5 track that is held in position only by the operating mechanism and one connecting rod shall be operated to all of its positions during one inspection in every 3 month period.
- (c) In the case of track that is used less than once a month, each switch, turnout, track crossing, and moveable bridge lift rail assembly or other transition device shall be inspected on foot before it is used.

§213.237 Inspection of rail.

(a) In addition to the inspections required by §213.233, each track owner shall conduct internal rail inspections sufficient to maintain service failure rates per rail inspection segment in accordance with this paragraph (a) for a 12-month period, as determined by the track owner and calculated within 45 days of the end of the period. These rates shall not include service failures that occur in rail that has been replaced through rail relay since the time of the service failure. Rail used to repair a service failure defect is not

considered relayed rail. The service failure rates shall not exceed—

- (1) 0.1 service failure per year per mile of track for all Class 4 and 5 track:
- (2) 0.09 service failure per year per mile of track for all Class 3, 4, and 5 track that carries regularly-scheduled passenger trains or is a hazardous materials route; and
- (3) 0.08 service failure per year per mile of track for all Class 3, 4, and 5 track that carries regularly-scheduled passenger trains and is a hazardous materials route.
- (b) Each rail inspection segment shall be designated by the track owner no later than March 25, 2014 for track that is Class 4 or 5 track, or Class 3 track that carries regularly-scheduled passenger trains or is a hazardous materials route and is used to determine the milepost limits for the individual rail inspection frequency.
- (1) To change the designation of a rail inspection segment or to establish a new segment pursuant to this section, a track owner must submit a detailed request to the FRA Associate Administrator for Railroad Safety/Chief Safety Officer (Associate Administrator). Within 30 days of receipt of the submission, FRA will review the request. FRA will approve, disapprove, or conditionally approve the submitted request, and will provide written notice of its determination.
- (2) The track owner's existing designation shall remain in effect until the track owner's new designation is approved or conditionally approved by FRA.
- (3) The track owner shall, upon receipt of FRA's approval or conditional approval, establish the designation's effective date. The track owner shall advise in writing FRA and all affected railroad employees of the effective date.
- (c) Internal rail inspections on Class 4 and 5 track, or Class 3 track with regularly-scheduled passenger trains or that is a hazardous materials route, shall not exceed a time interval of 370 days between inspections or a tonnage interval of 30 million gross tons (mgt) between inspections, whichever is shorter. Internal rail inspections on Class 3 track that is without regularly-